

Fig. 1A

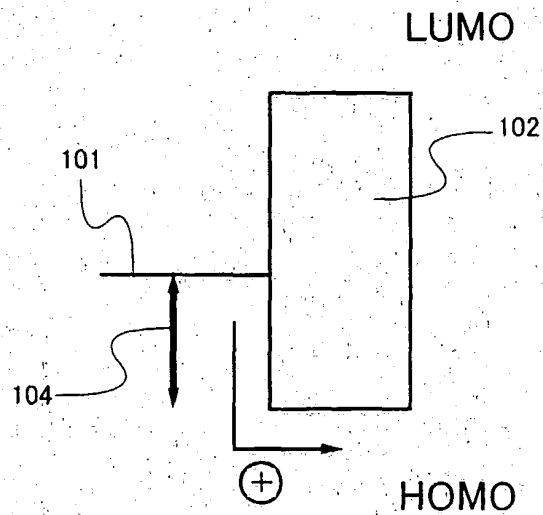


Fig. 1B

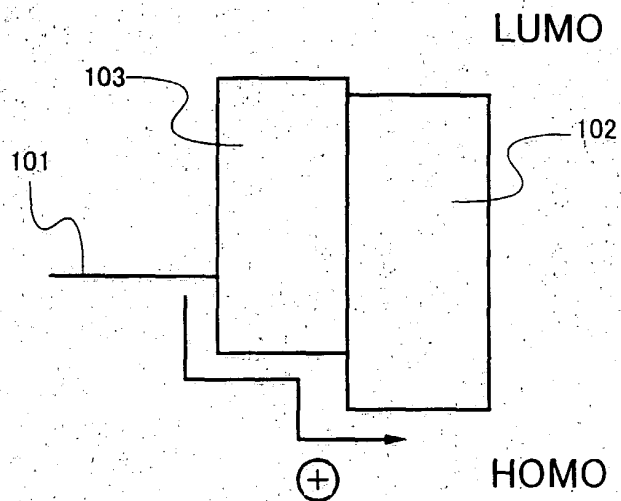


Fig. 2

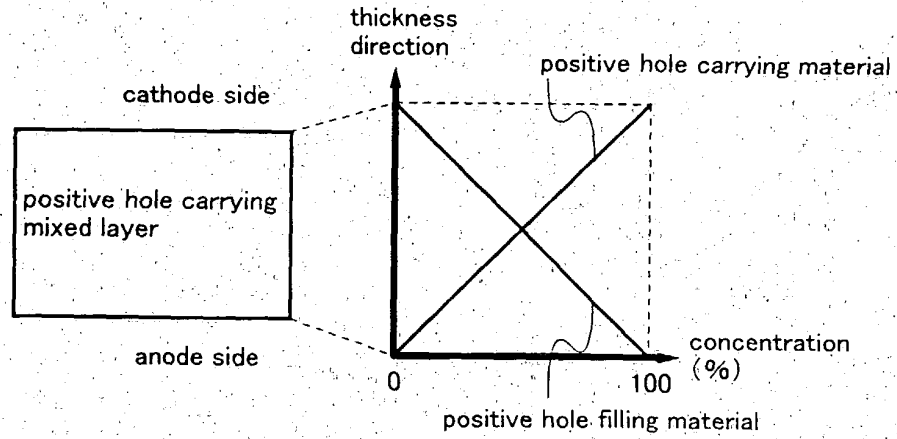


Fig. 3

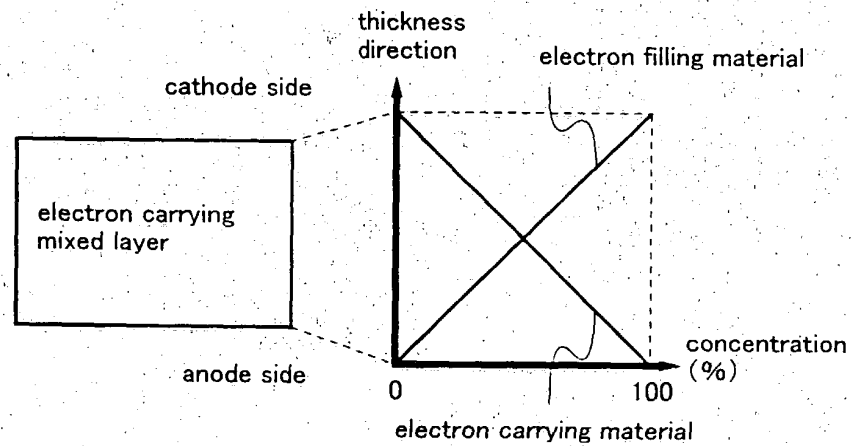


Fig. 4

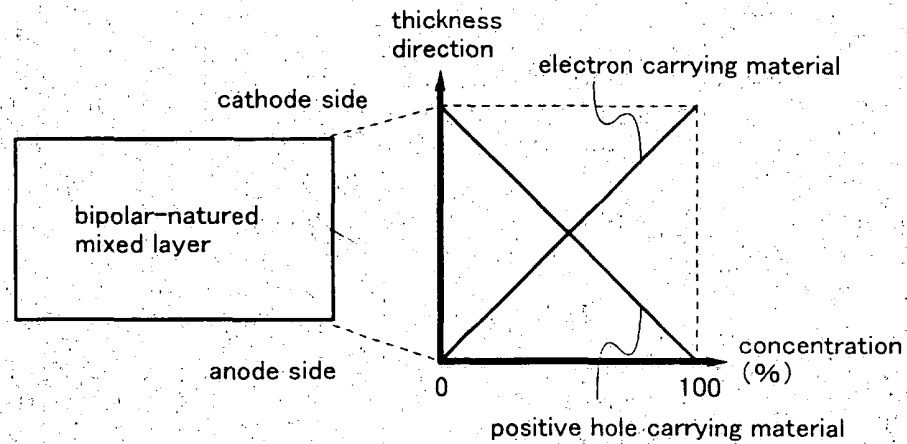


Fig. 5

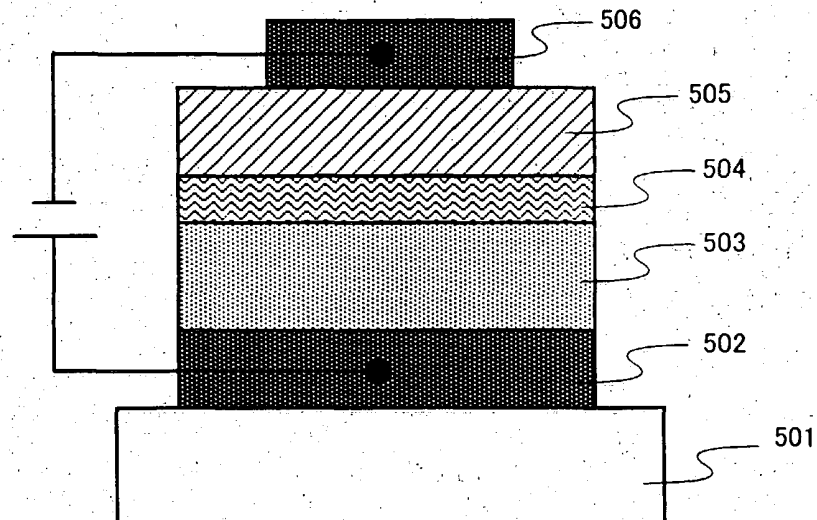


Fig. 6

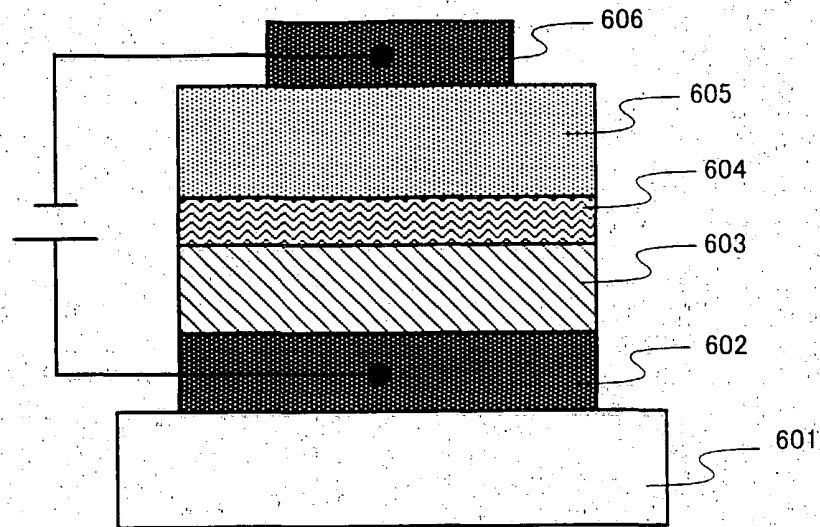


Fig. 7

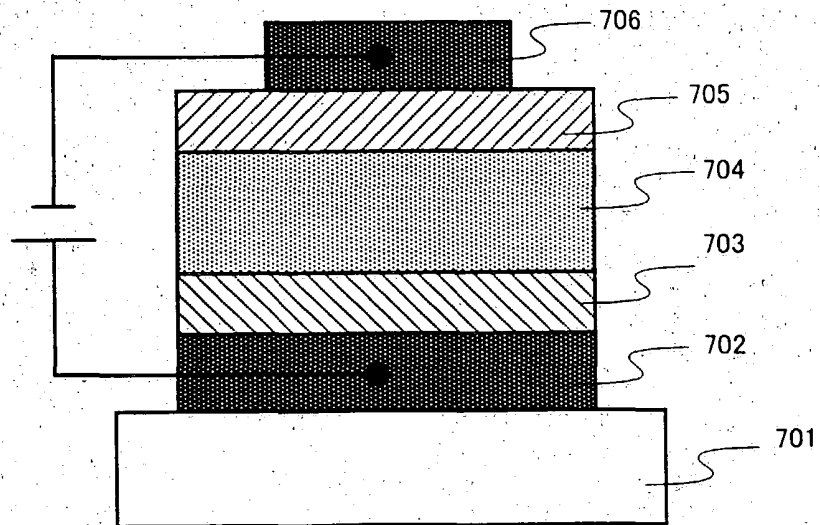


Fig. 8

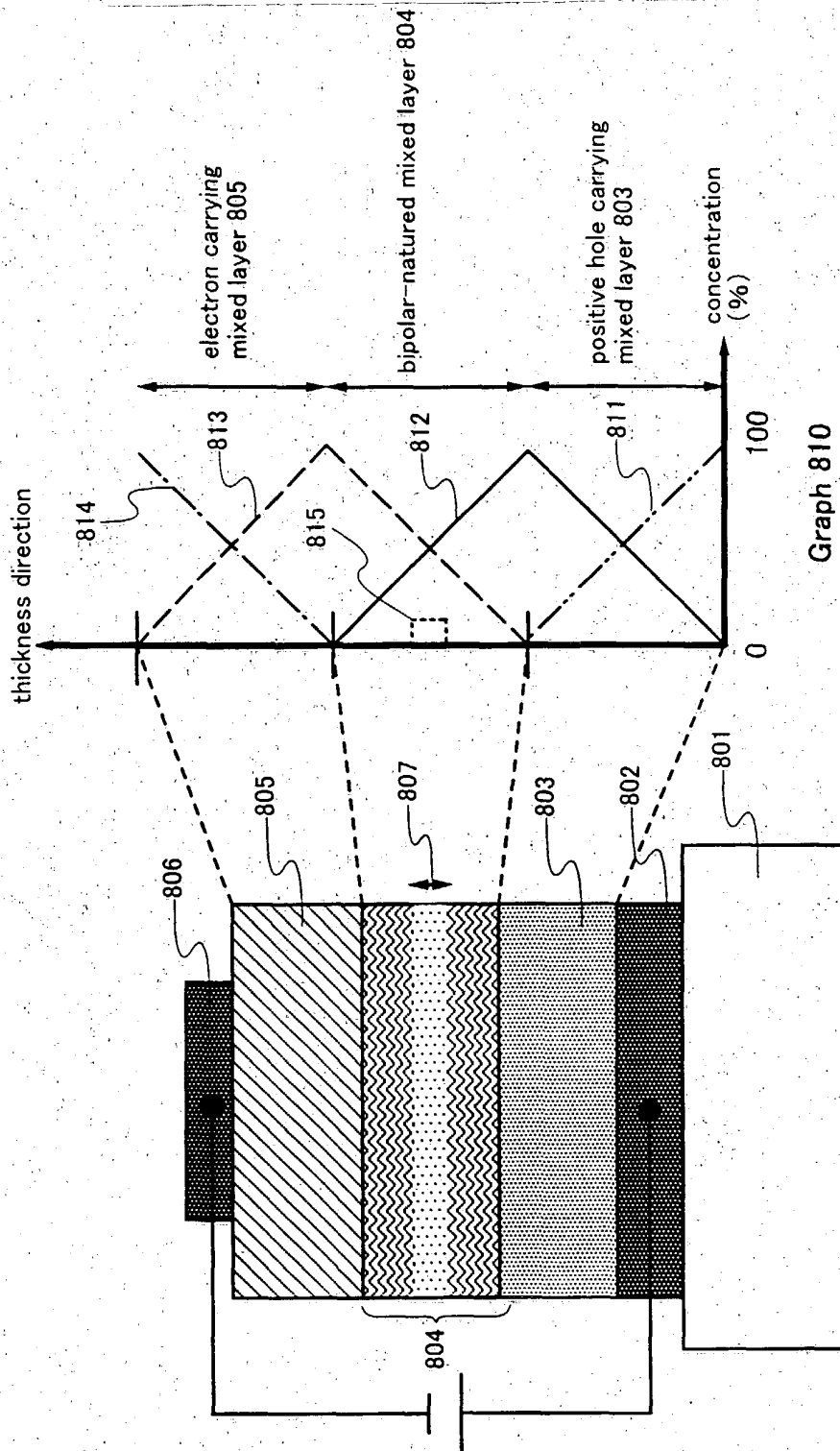


Fig. 9

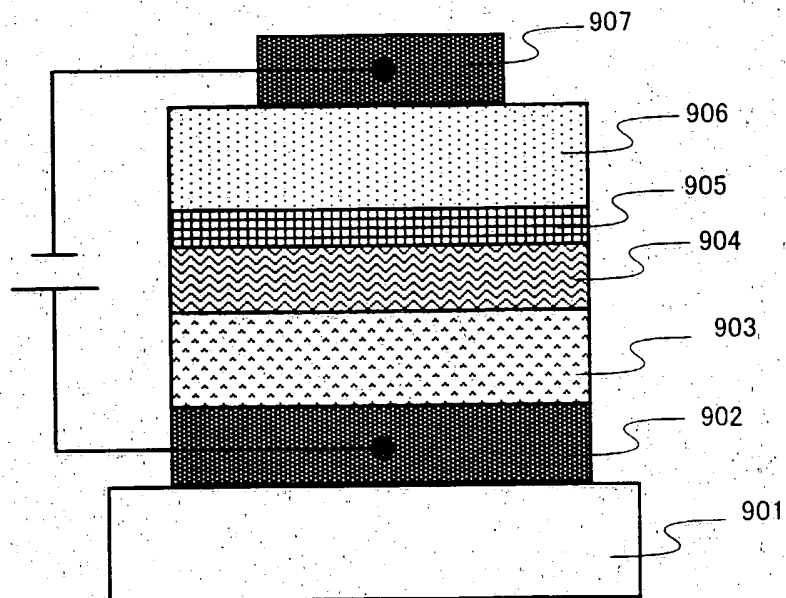


Fig. 10

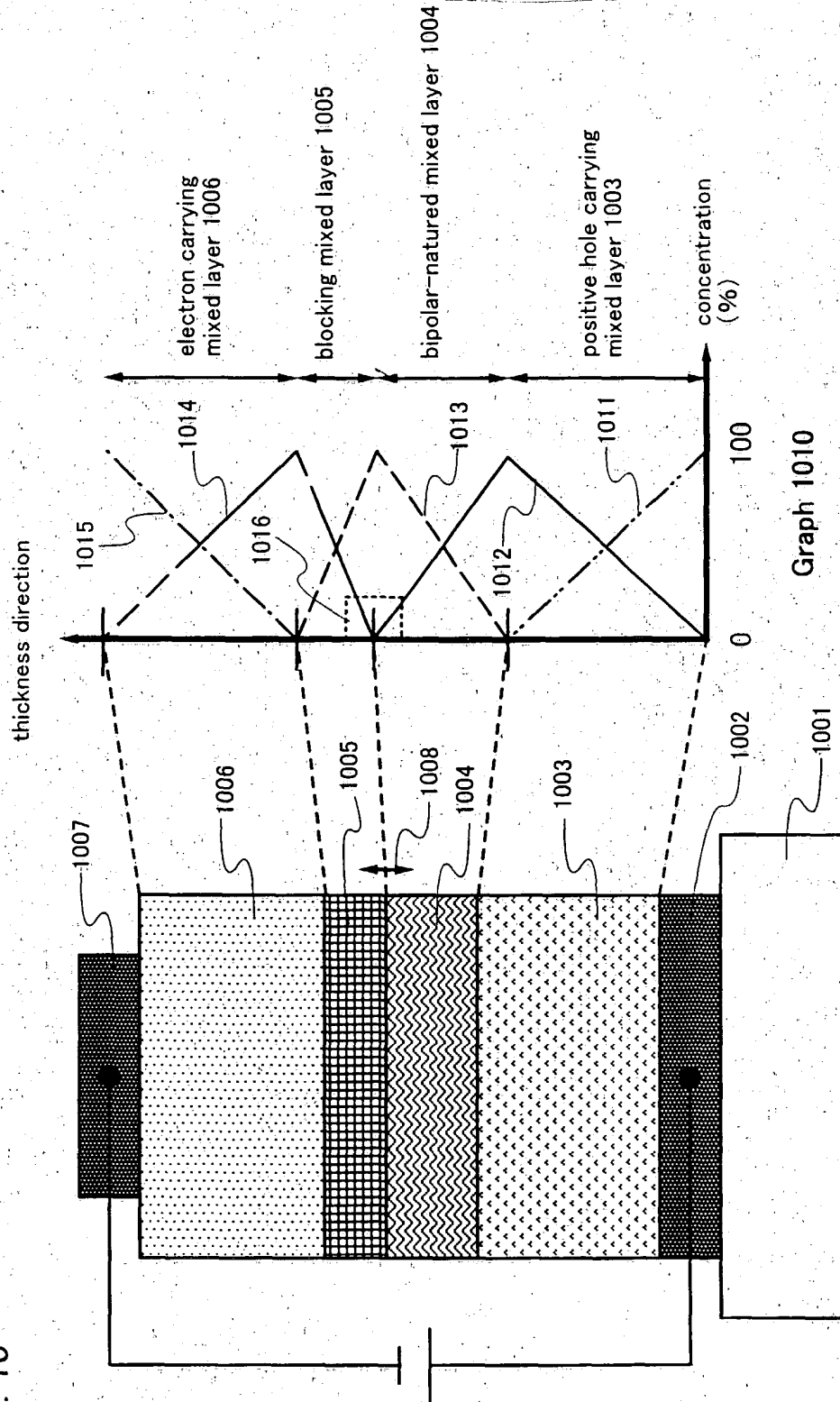
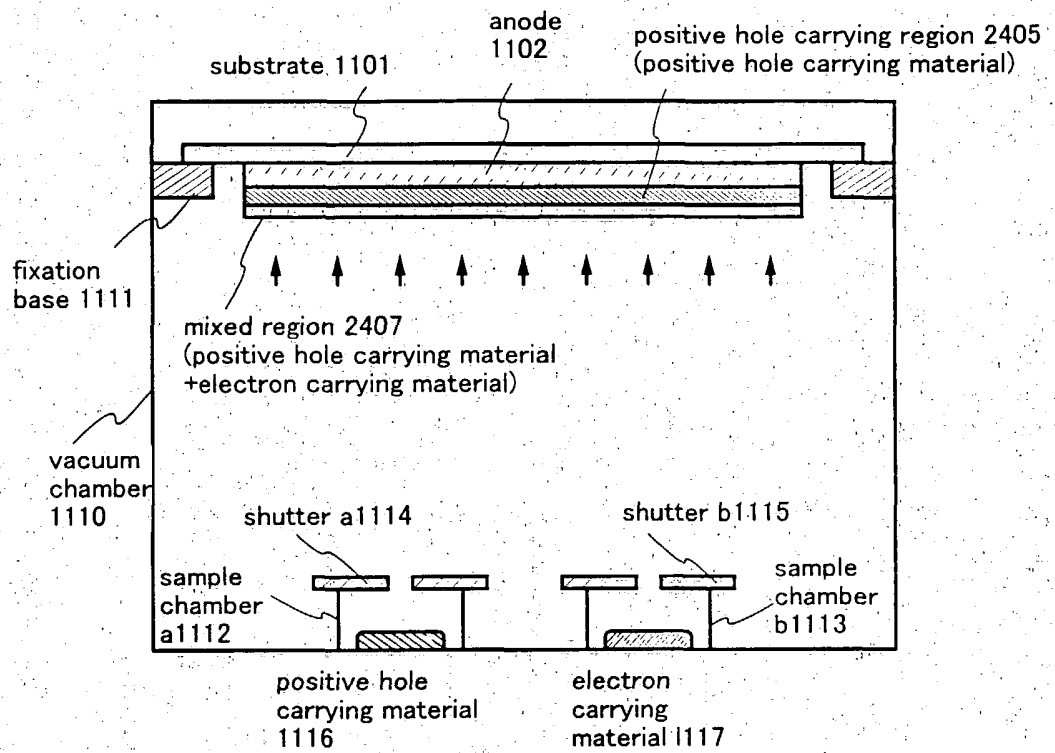


Fig. 11



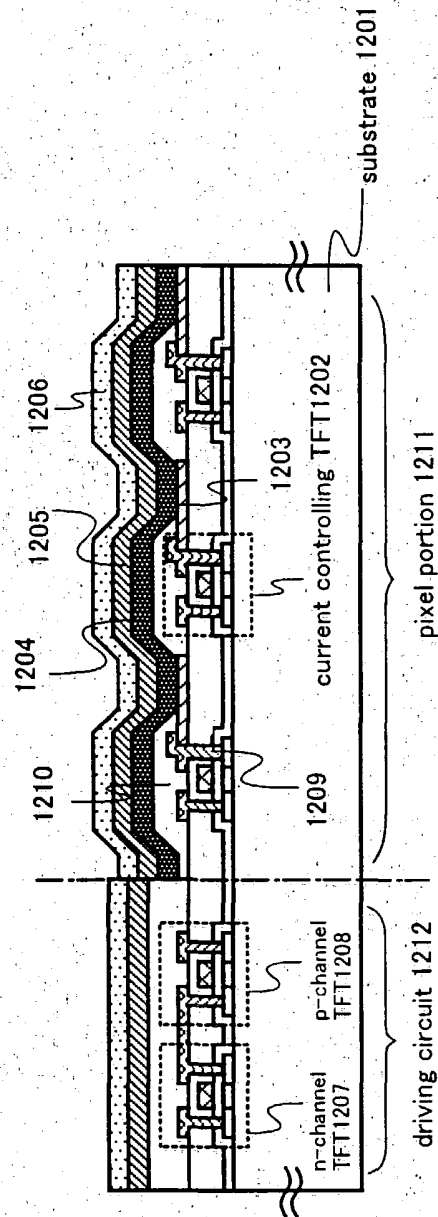


Fig. 12A

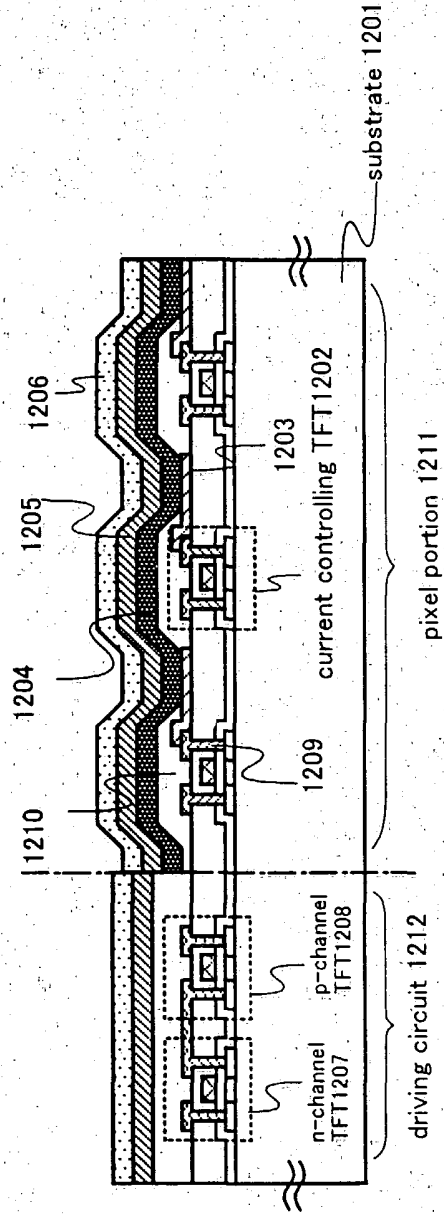


Fig. 12B

A detailed cross-sectional view of a semiconductor device. The device is sandwiched between two electrodes, labeled 'p' at the top and 'p'' at the bottom. The structure consists of several layers and components, labeled with reference numerals: 1201 (bottom layer), 1202 (first layer above 1201), 1203 (second layer above 1202), 1204 (third layer above 1203), 1205 (fourth layer above 1204), 1206 (fifth layer above 1205), 1207 (sixth layer above 1206), 1208 (seventh layer above 1207), 1209 (eighth layer above 1208), 1301 (ninth layer above 1209), 1302 (tenth layer above 1301), 1303 (eleventh layer above 1302), 1304 (twelfth layer above 1303), 1305 (thirteenth layer above 1304), 1306 (fourteenth layer above 1305), 1307 (fifteenth layer above 1306), 1308 (sixteenth layer above 1307), and 1309 (seventeenth layer above 1308). The layers are separated by various interfaces, some of which are labeled with 'a', 'b', and 'c'. Two arrows labeled 'light' point towards the device from the right side, indicating its function as a light-emitting or light-receiving device.

Fig. 14A

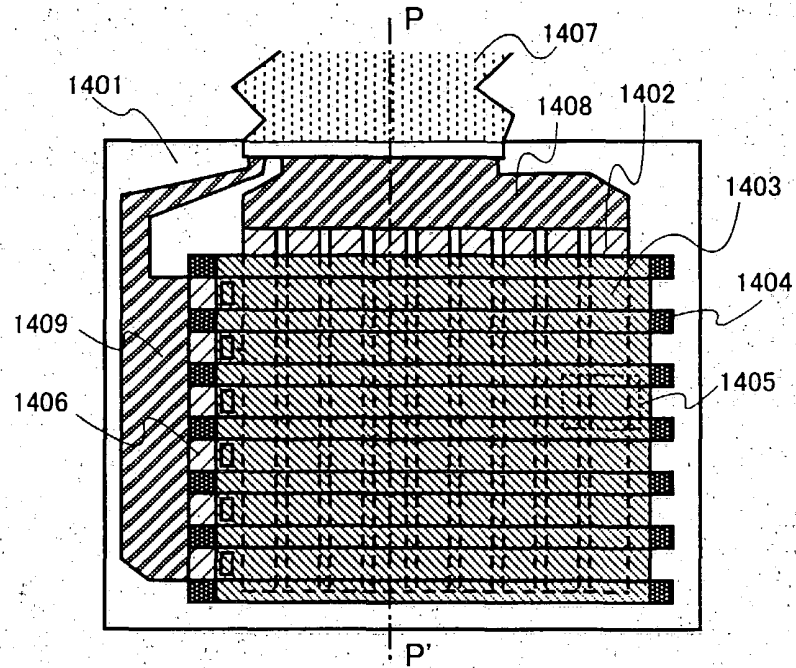


Fig. 14B

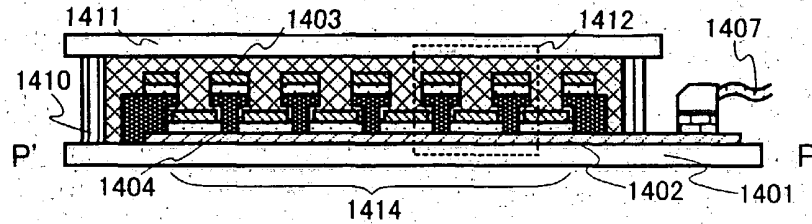


Fig. 14C

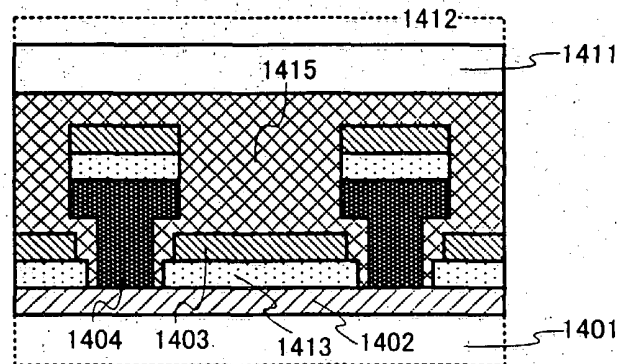


Fig. 15A

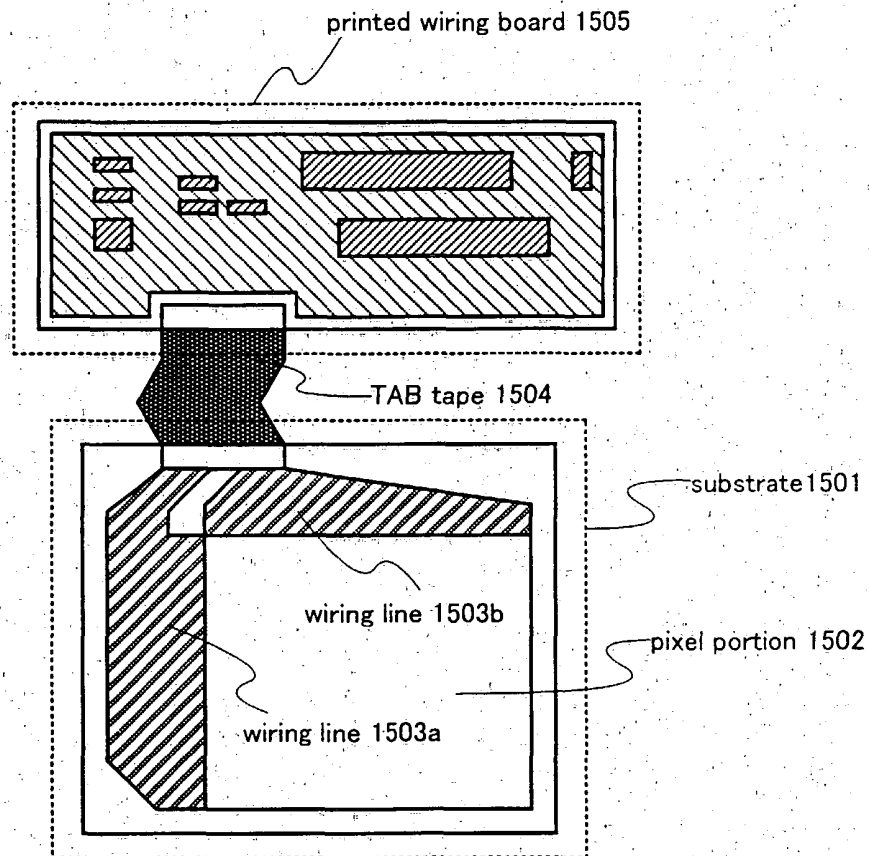


Fig. 15B

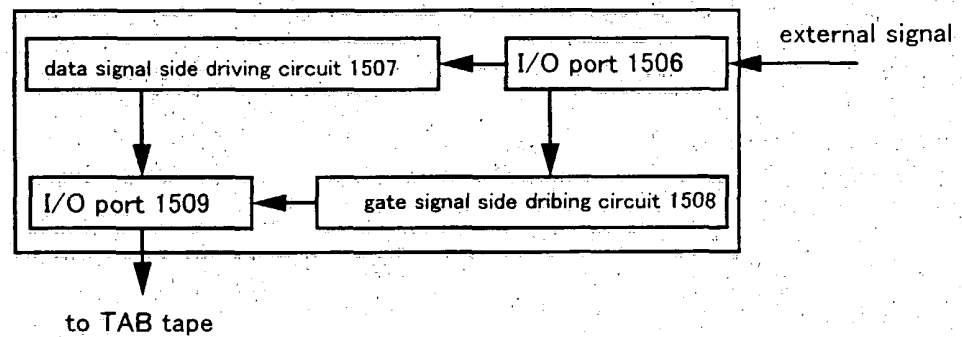


Fig. 16A

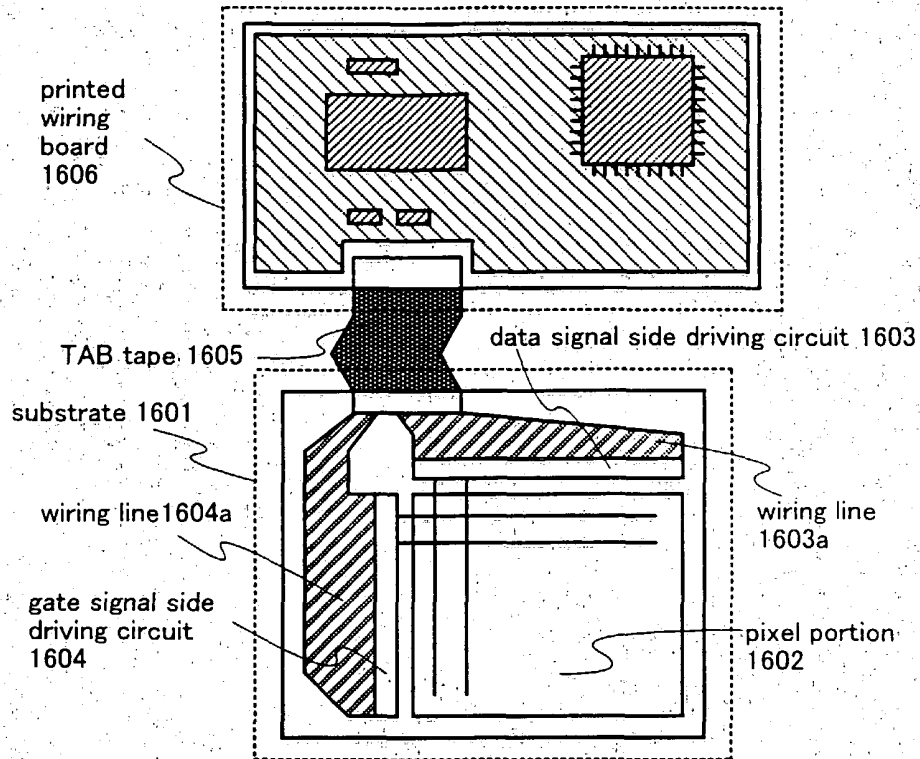
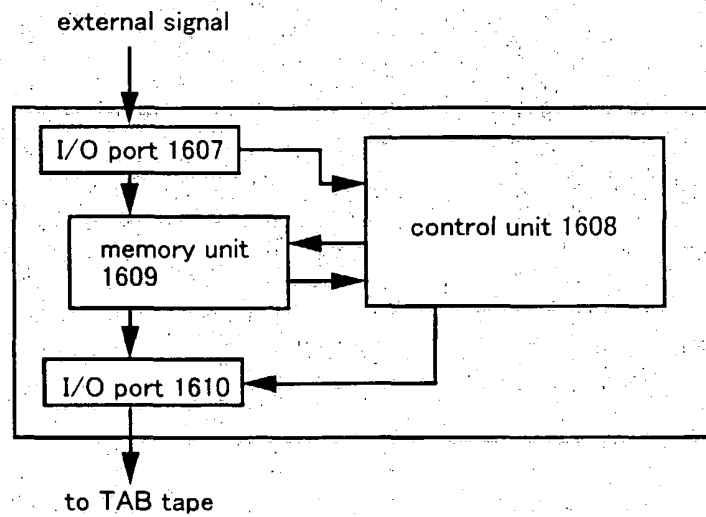


Fig. 16B



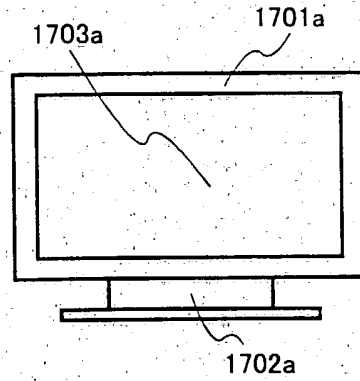


Fig. 17A

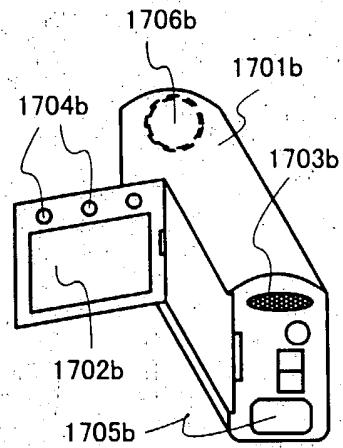


Fig. 17B

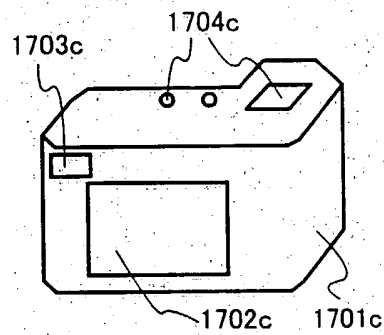


Fig. 17C

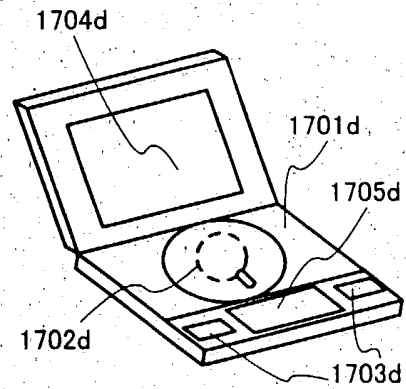


Fig. 17D

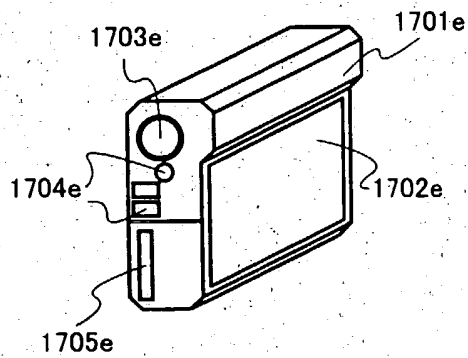


Fig. 17E

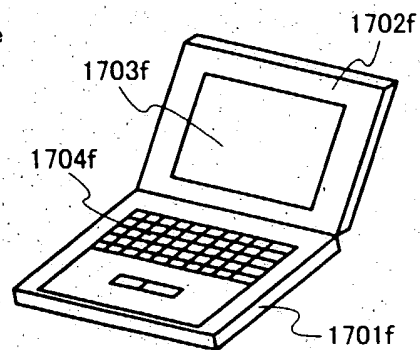


Fig. 17F

Fig. 18A

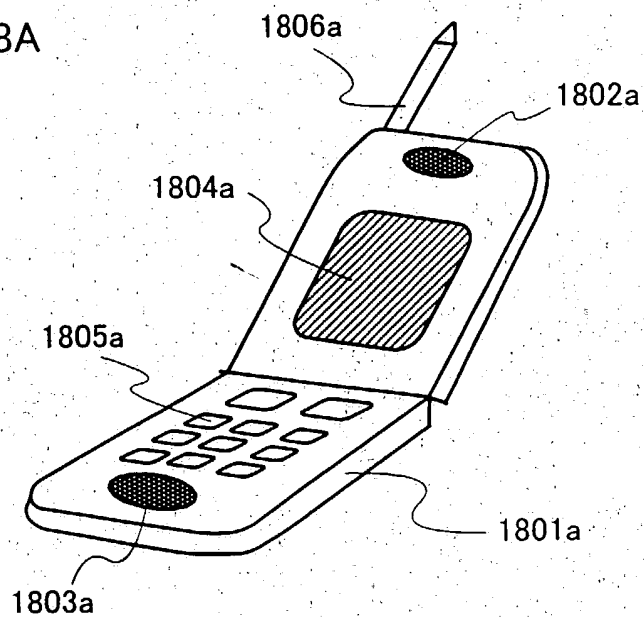
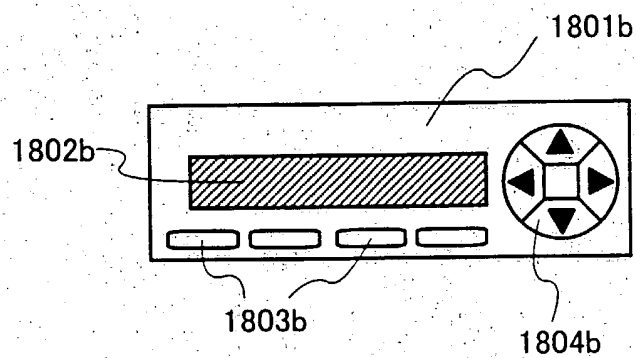


Fig. 18B



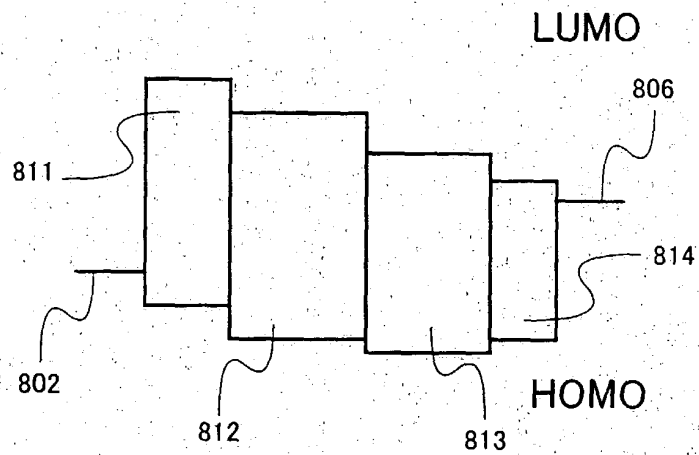


Fig. 19A

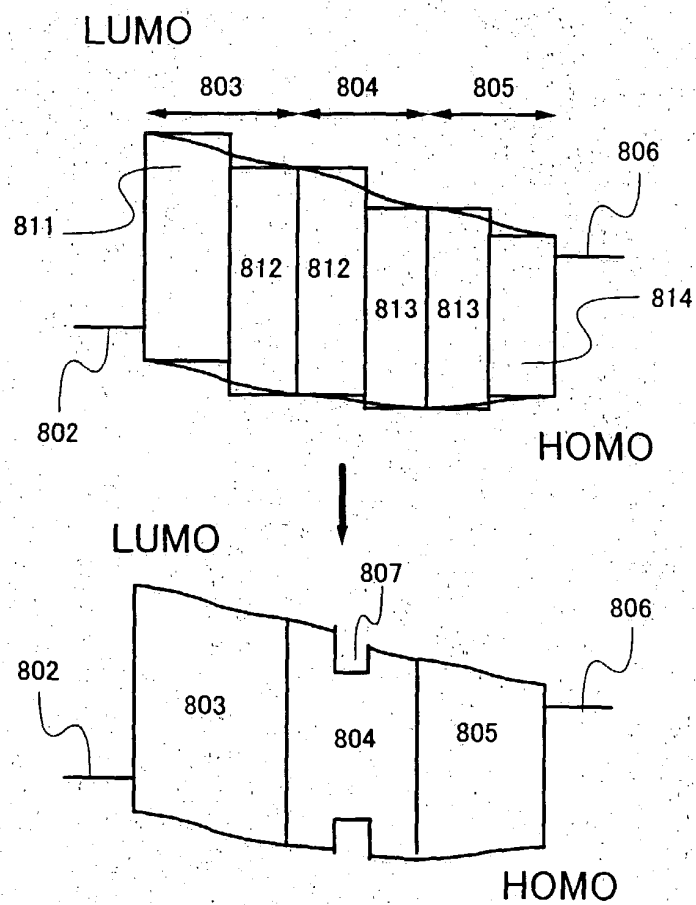


Fig. 19B

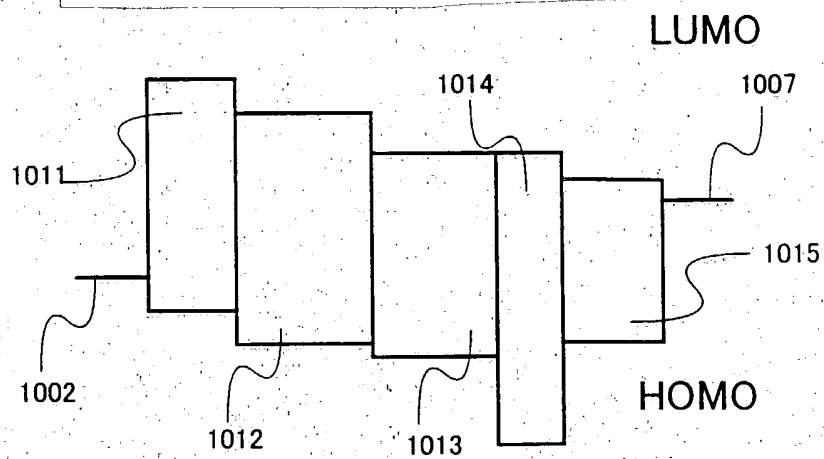


Fig. 20A

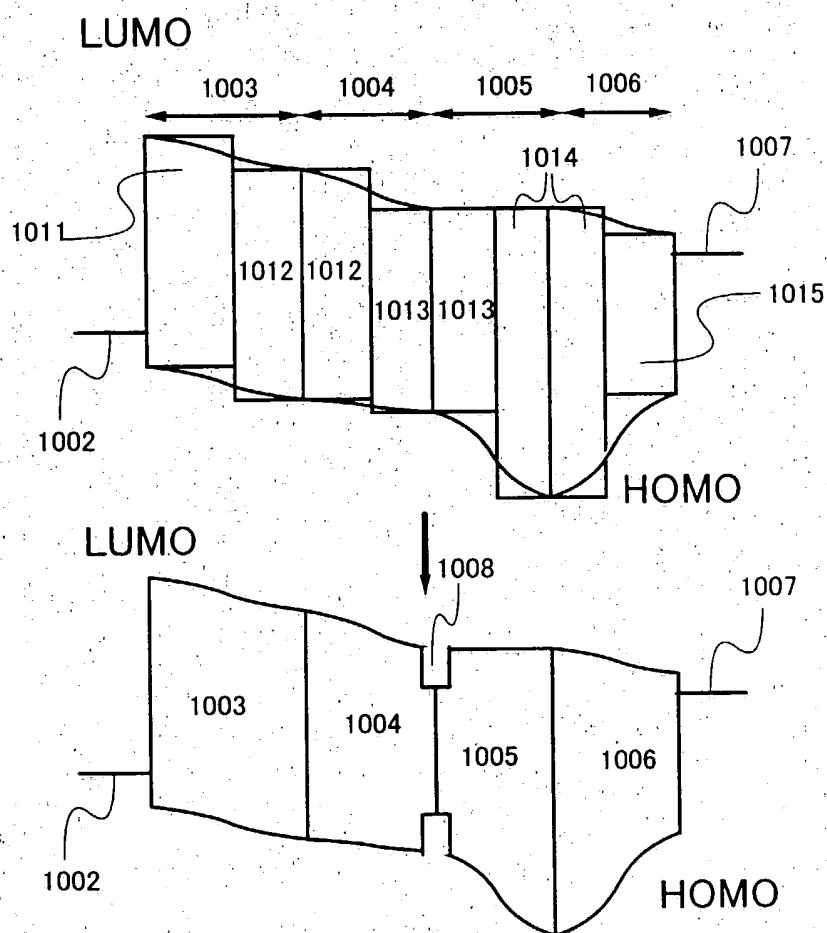
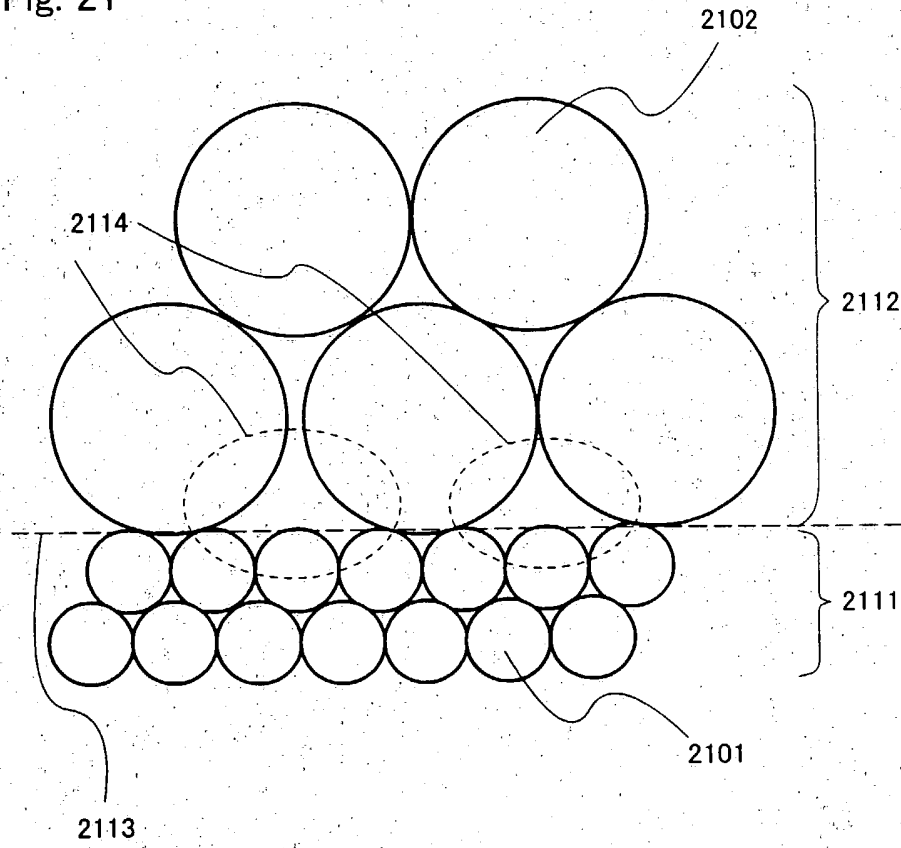


Fig. 20B

Fig. 21



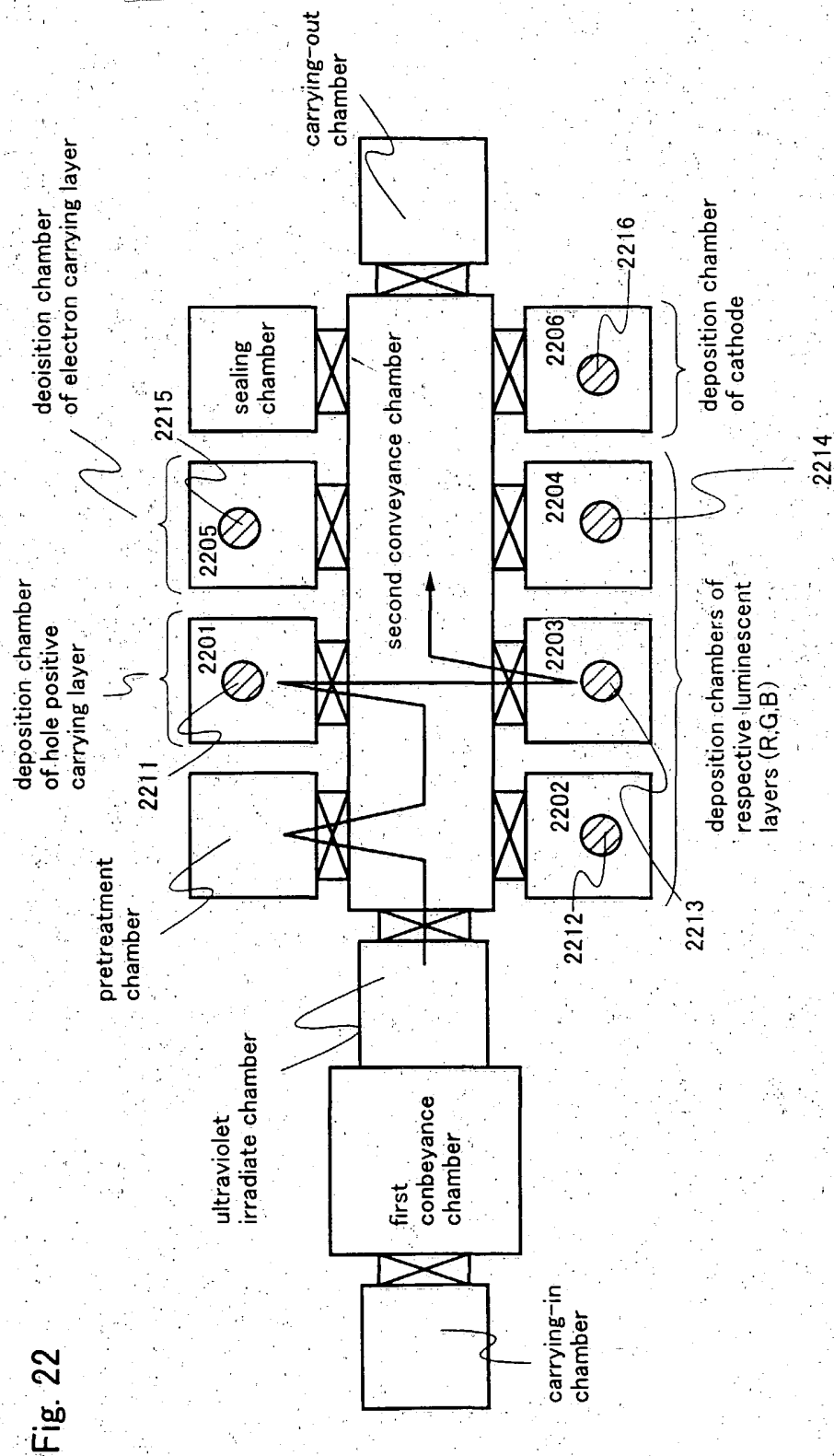


Fig. 23

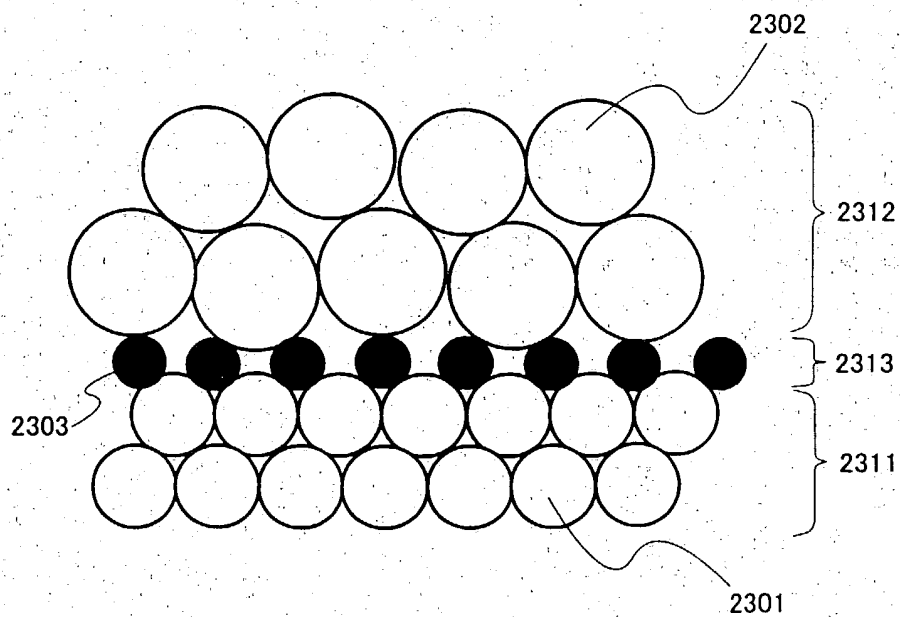


Fig. 24

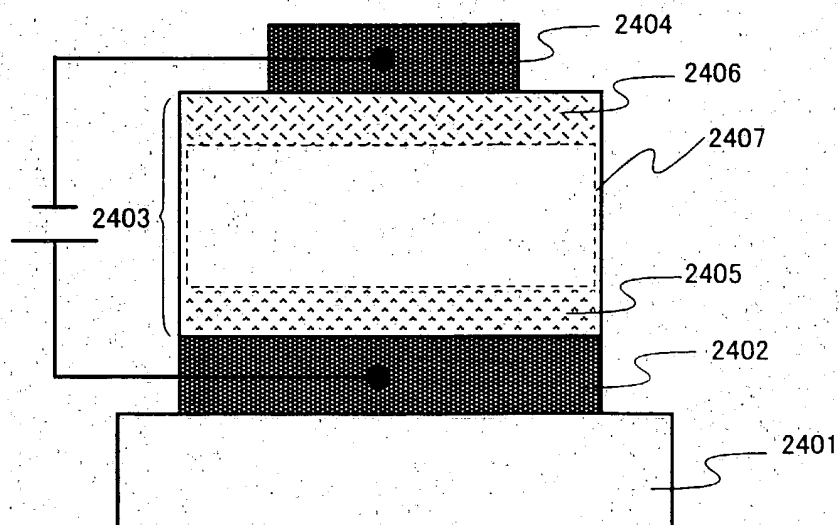


Fig. 25

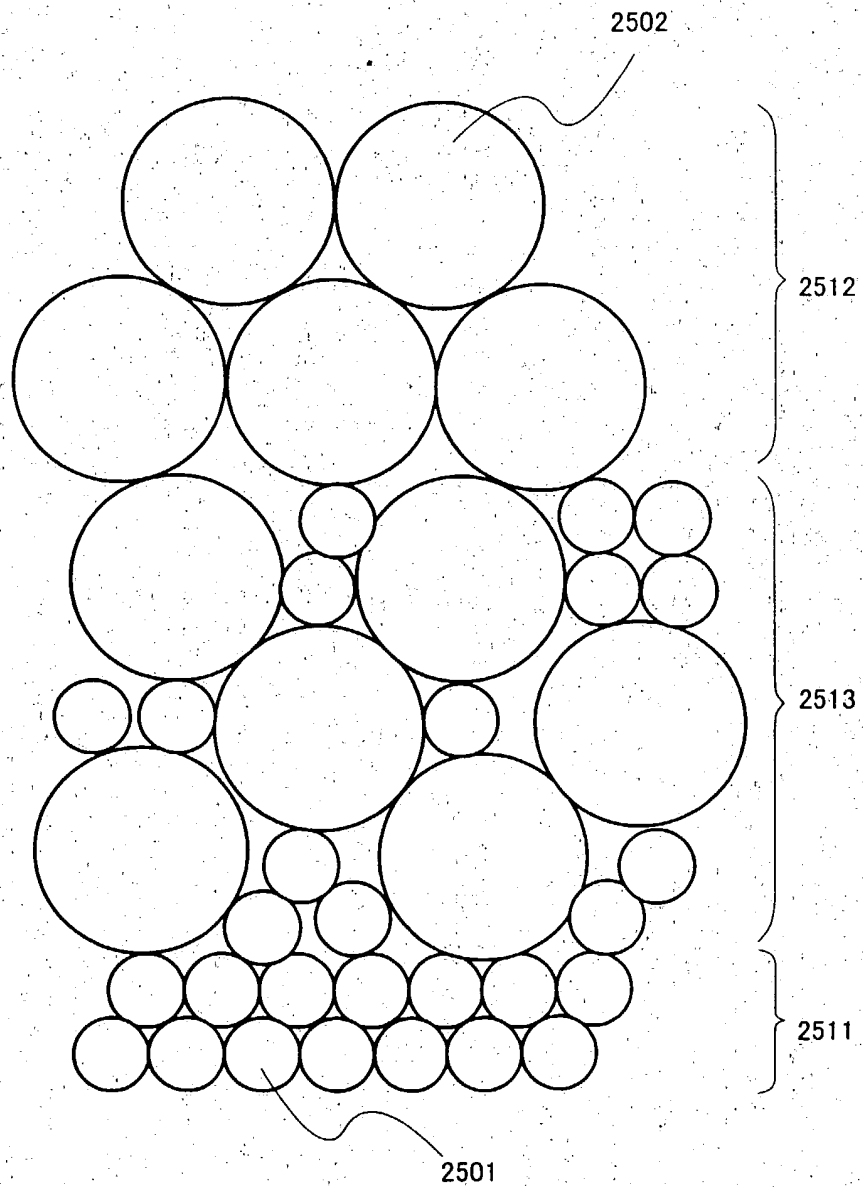


Fig. 26A

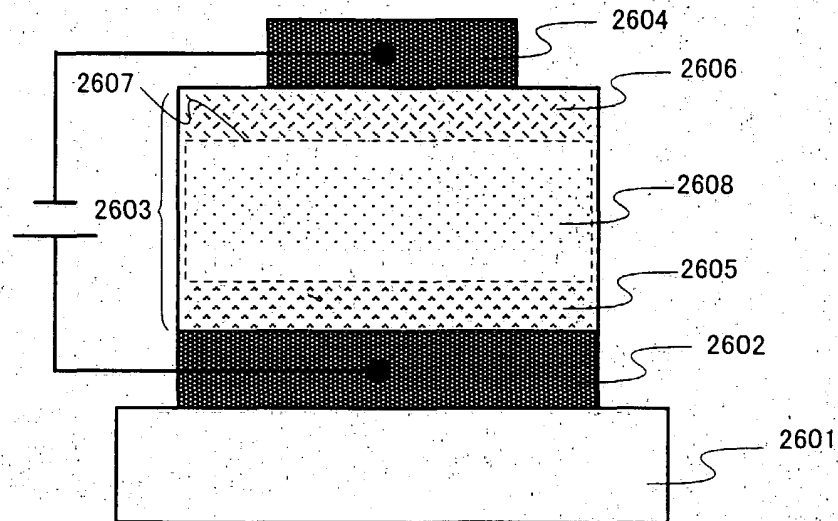


Fig. 26B

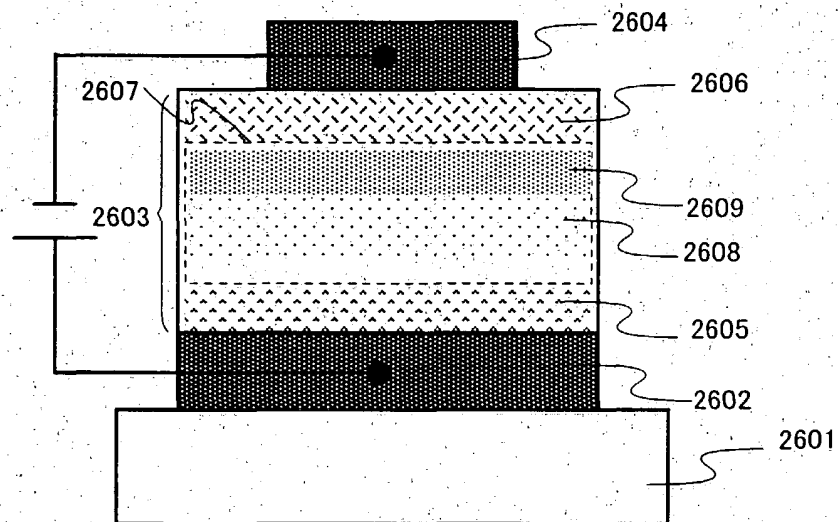


Fig. 27

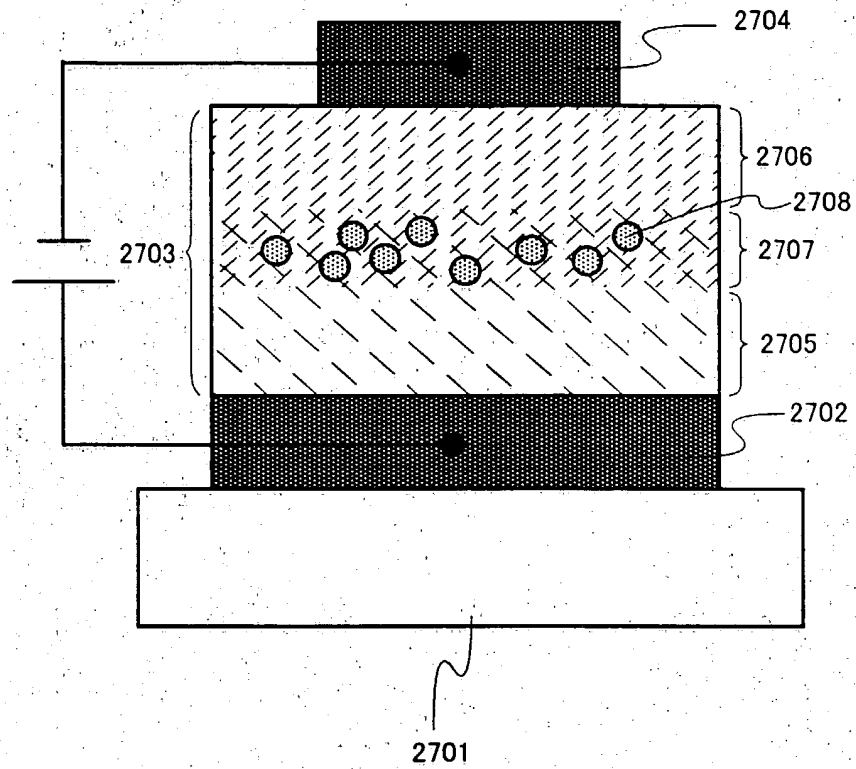


Fig. 28

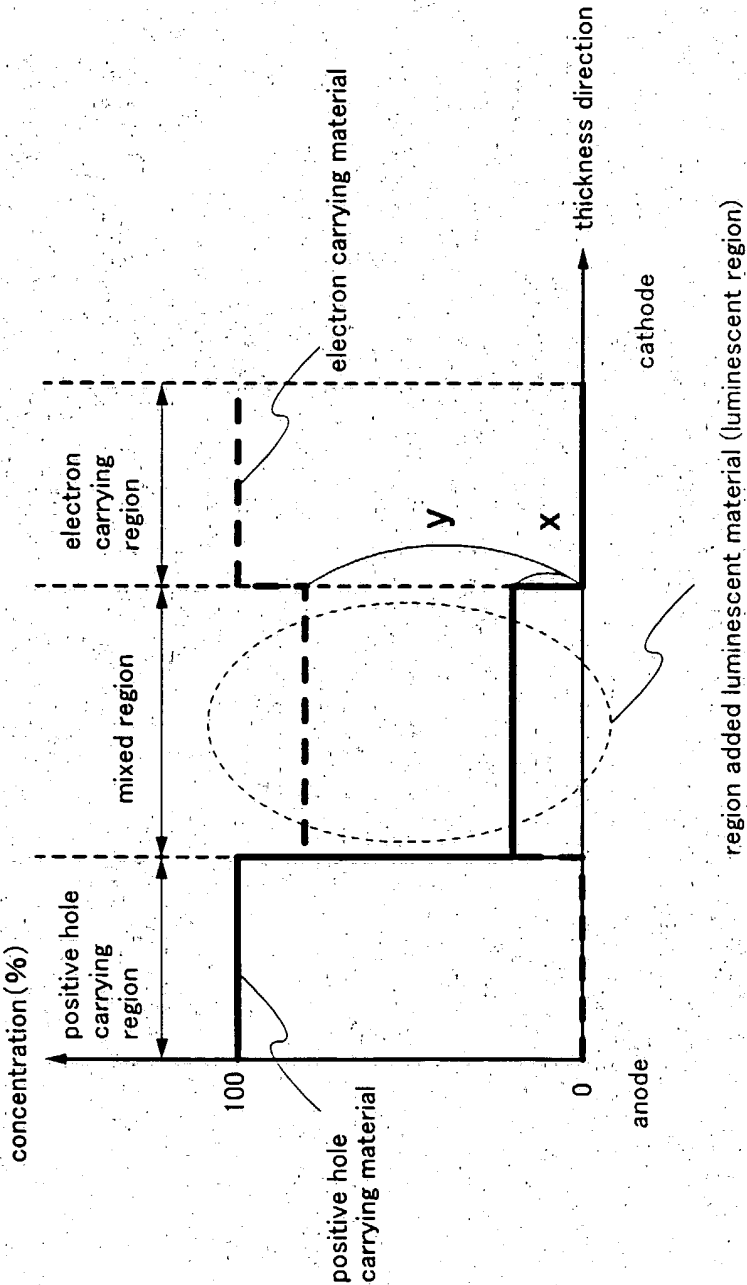


Fig. 29A

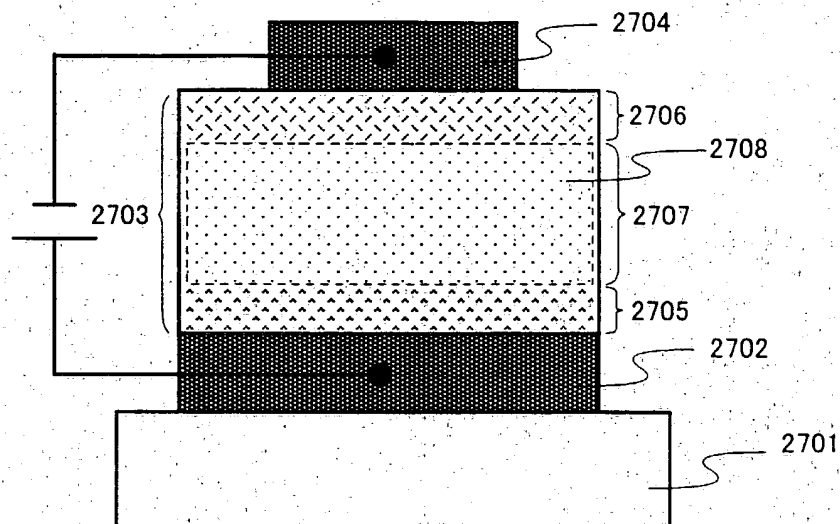


Fig. 29B

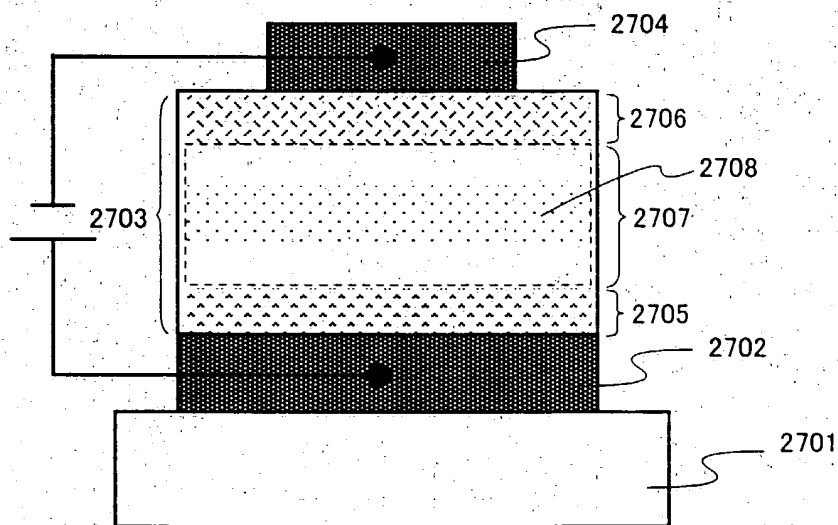


Fig. 30A

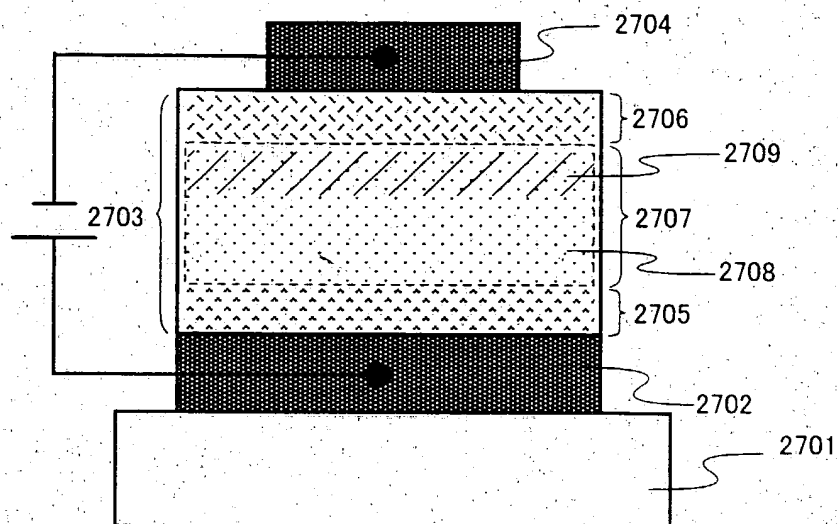


Fig. 30B

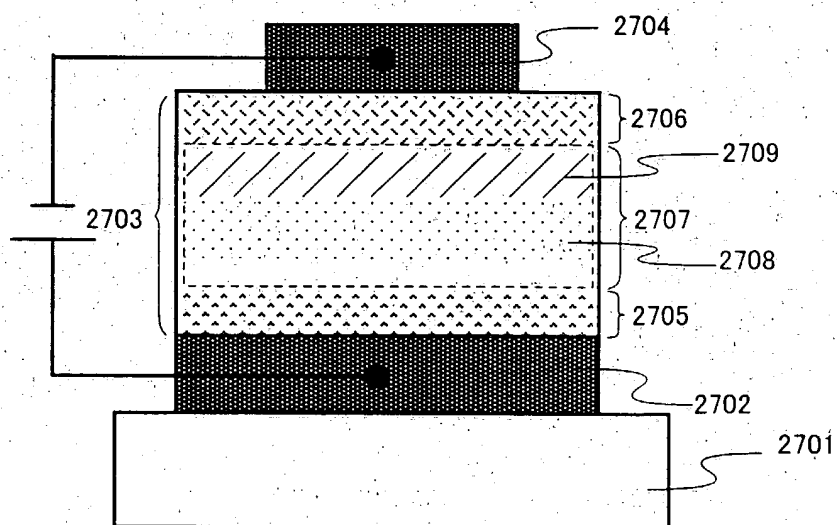


Fig. 31A

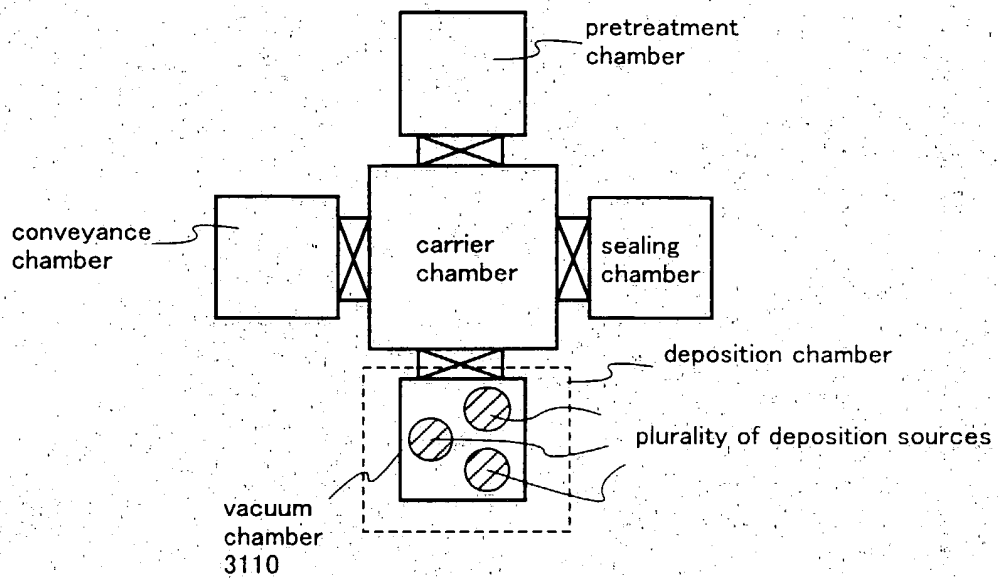


Fig. 31B

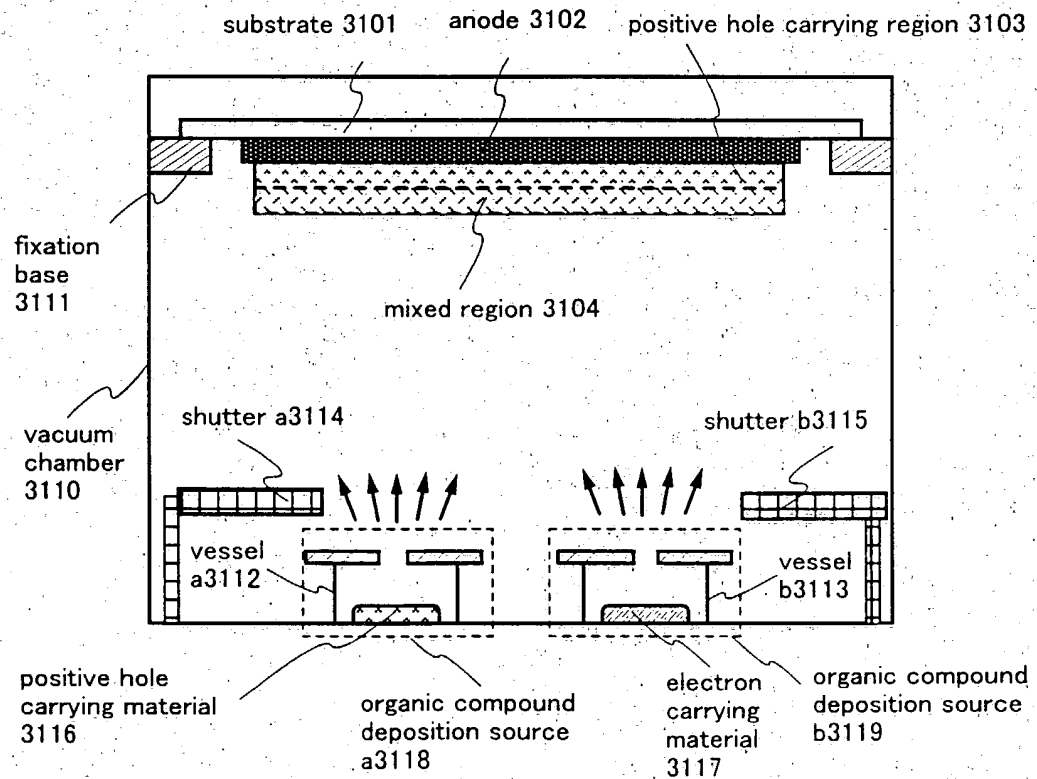


Fig. 32A

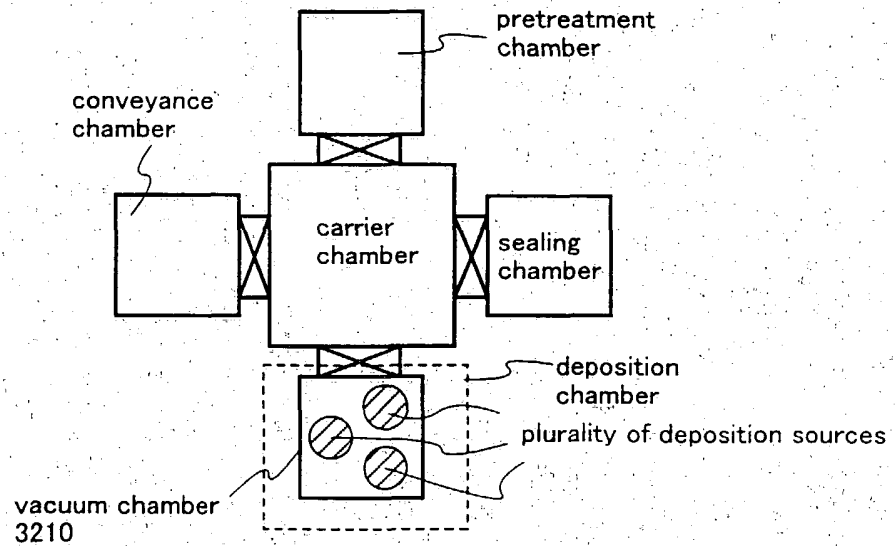


Fig. 32B

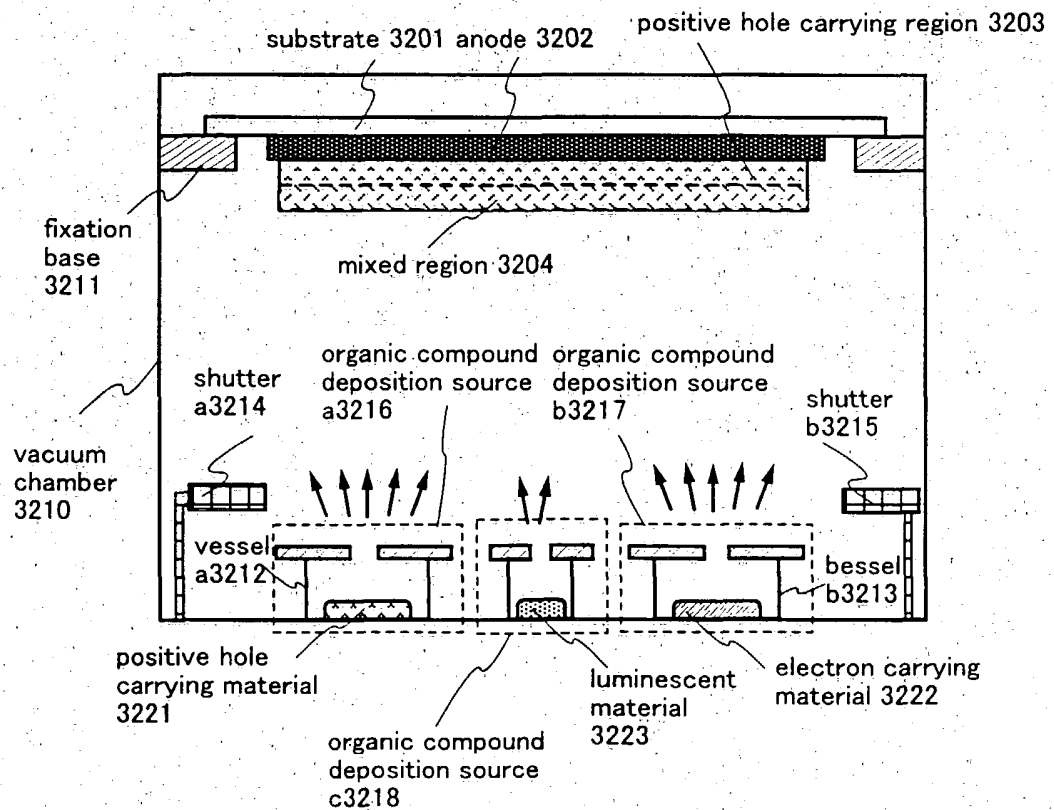


Fig. 33

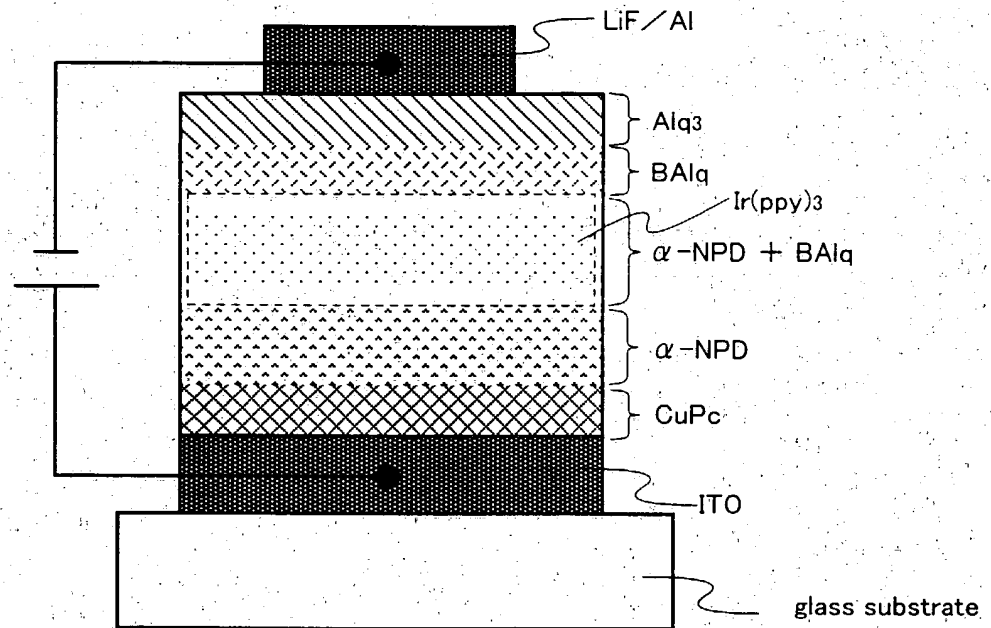
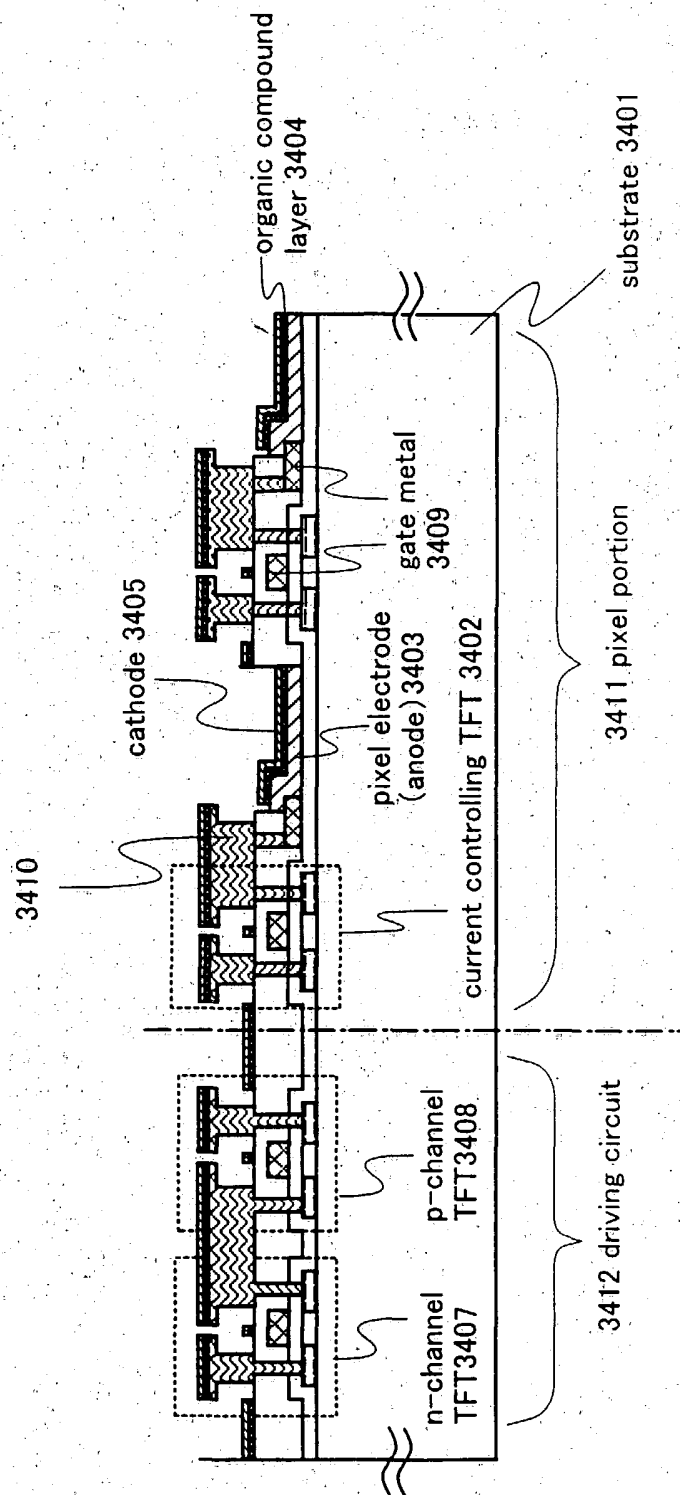


Fig. 34



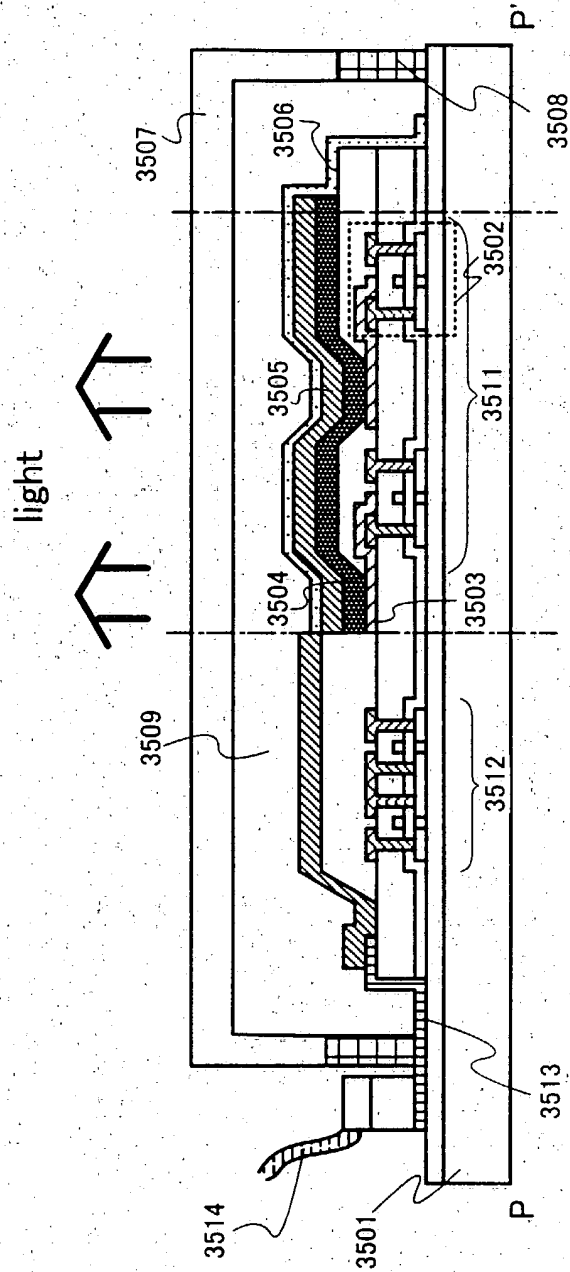


Fig. 35

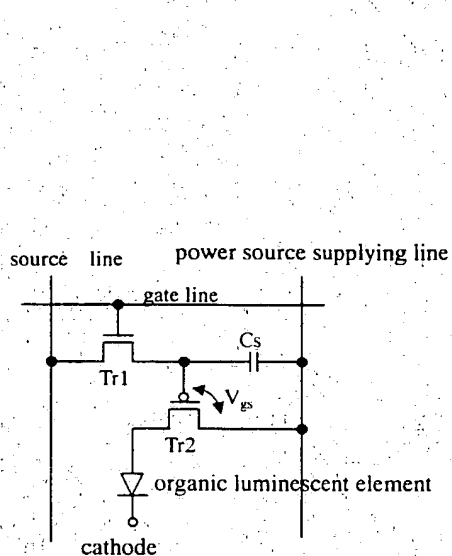


Fig. 36A

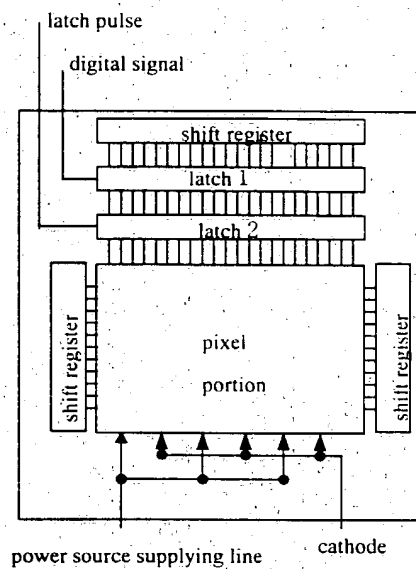
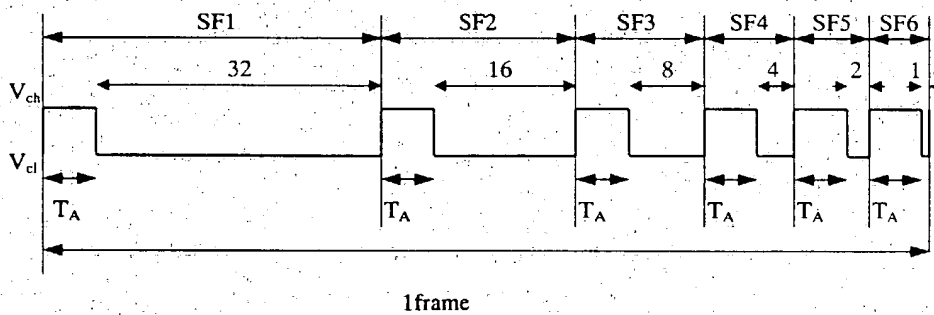


Fig. 36C



SF1-SF6: subframe, T_A: write in time

Fig. 36B

Fig. 37

